

Remarks

In response to the Office Action dated July 23, 2009, the Applicants request reconsideration in view of the following remarks. Claims 4-20, 22 and 28-30 are pending in this application. No amendments are made.

Although Applicants may disagree with statements made by the Examiner in reference to the claims and the cited references, the Applicants are not discussing all these statements in the current Office Action response, since reasons for the patentability of each pending claim are provided without addressing these statements. However, the Applicants reserve the right to address these statements at a later time, if necessary.

Claim rejections – 35 USC § 102

Claims 16, 20, 28, 29 and 30 stand rejected under 35 USC 102(b) as anticipated by Hopkins, US patent 4,161,786. As claim 16 is dependent on claim 4, which is indicated to be rejected under 35 USC 103(a) as being unpatentable over Hopkins in view of Fellman, the Applicants understanding is that the reference to claim 16 is a typographic error and that claims 19, 20, 28, 29 and 30 stand rejected under 35 USC 102(b) as anticipated by Hopkins '786. These rejections are respectfully traversed, at least for the reasons explained below.

Hopkins does not disclose each and every feature recited in claims 19, 20, 28, 29 and 30. In particular, Hopkins at least does not disclose a feature corresponding to "*g) triggering the second communication cycle with an external or internal event trigger; and h) transmitting data across the communication media during the second communication cycle in an event triggered communication mode in response to step g)*" as recited, for example, in claim 28.

Hopkins discloses a time division multiple access communications system. The system is a TDMA system (col.3 II.39-41) and provides a transfer of signals between subscriber devices in one or more time slots in a repetitive framed sequence (col.4 II.51-55). The TDMA system includes a plurality of subscriber devices 14, 16, 18 coupled to a common signal path 10, 12 via a respective bus interface unit BIU 20,22,24 (col.2 II. 36-38; Fig. 1). The BIU's provide access to the signal path for their associated devices (col.5 II.1-2). For the transmission of signals, each BIU may be assigned a set of time slots of the sequence (col.5 34-36).

Hopkins uses the term "dual mode" (cf. col.5 I.34-36). However, this refers to the different modes of allocation of a set of time slots in the same sequence which can be assigned to a BIU/subscriber device and does not refer to different communication cycles. The first mode of allocation is a static allocation of time slots, applicable to a first set of the slots of a sequence which are uniquely assigned to a single BIU (cf. col.5 II.49-52). The second mode of allocation is contention based allocation, applicable to a second set of time slots of the same sequence available for assignment to a plurality of BIU's on a contention bases. The second set of time slots are the remaining slots of the same sequence as the first set of the slots, i.e. those not allocated statically. (See e.g. col.5 II. 52-55).

Thus, the first and second set are part of the same sequence, which consists of statically allocated time slots and contention based allocated time slots (see e.g. col. 19 II.31-33). Hopkins does not disclose a "*second communication cycle*", as recited in claim 28. The first set of slots and the second set of slots are necessarily triggered in the same way, since they are part of the same sequence. It is therefore impossible that the first set is time-triggered while the second set is triggered differently,

e.g. event triggered. Hopkins therefore does not disclose "*triggering the second communication cycle with an external or internal event trigger*" as recited, for example, in claim 28.

The Office Action states that Hopkins discloses, at col.4 l. 66-col.5 l. 4 and col.5 ll. 36-44, "the BIU triggering a time during the first cycle". Hopkins is therefore interpreted to disclose both "triggering the first communication cycle with a time trigger" and "triggering the second communication cycle with an external or internal event trigger" (cf. p. 3 at c) and g)). The Applicants respectfully traverses this interpretation. In particular, col.4 l. 66-col.5 l. 4 and col.5 ll. 36-44 do not disclose what initiates (i.e. triggers) execution of a time slot or the sequence, and therefore does not disclose a triggering, neither of a time slot nor of the sequence. In col.4 l. 66-col.5 l. 4 and col.5 ll. 36-44, Hopkins only states that a BIU may be assigned one or more time slots of a sequence, and that the BIU is adapted to transmit in the assigned time slots. Referring to col.4 l. 66-col.5 l. 4 (emphasis added):

" Each BIU is adapted to transmit a serial bit stream in selected time slots on the inbound bus 10, and to receive a continuous serial bit stream from the outbound bus 12. The BIU's provide access to the data bus for their associated devices and establish electrical and functional capabilities between the buses and the respective subscribers. (...)"

and col.5 ll. 36-44 (emphasis added):

Each BIU may be assigned a set of slots in the framed sequence for the transmission of time slot signals on the inbound bus 10. In the present embodiment, sets of slots are defined in the same manner described in the incorporated

reference, i.e. *first slot number and slot spacing*. In alternative embodiments, different time slot set designations may be utilized. The present embodiment is a dual mode system wherein a first set of the BIU/subscriber device pairs (referred to below as *static slot terminals*) have relatively static slot assignments where a set of slots may be uniquely assigned to a single BIU."

Therefore, col.4 I. 66-col.5 I. 4 and col.5 II. 36-44 only disclose that a BIU is assigned time slots and can only send in the assigned time slot. Hopkins does not disclose what initiates execution of a sequence and therefore does not disclose "*triggering the first communication cycle with a time trigger*" and "*triggering the second communication cycle with an external or internal event trigger*".

The Applicants also submit that the reasoning in the Office Action is incomplete and respectfully request a more extensive explanation in this regard. The Applicants observe that Hopkins cannot disclose "the BIU triggering a time during the first cycle" because "time" cannot be initiated, and hence can not be triggered. Although a lapse of time can initiate an event (i.e. a time trigger), Hopkins does not disclose that the lapse of time per se causes starting of the sequence. The Applicants further observe that the element "*the BIU triggering a time during the first cycle*" cannot simultaneously correspond to two different, opposing features recited in claim 28, i.e. can not be simultaneously "*triggering the first communication cycle with a time trigger*" and "*triggering the second communication cycle with an external or internal event trigger*".

As follows from the above, Hopkins does not disclose a feature corresponding to "*g) triggering the second communication cycle with an external or internal event trigger; and h) transmitting data across the*

communication media during the second communication cycle in an event triggered communication mode in response to step g)" as recited, for example, in claim 28, and the rejection is thereby traversed.

Claims 19, 20, 29 and 30 recite features corresponding to these recitations and Hopkins therefore also fails to disclose each and every element recited in claims 19, 20, 28, 29 and 30.

Based on the above remarks, the Applicants believe that the rejection of claims 19, 20, 28, 29 and 30 under 35 U.S.C. 102 has been traversed. Accordingly, the Applicants respectfully request that this rejection be reconsidered and withdrawn, and that claims 19, 20, 28, 29 and 30 be allowed.

Claim rejections – 35 USC § 103

Claims 4-18 and 22 stand rejected under 35 USC 103(a) as being unpatentable over Hopkins in view of Fellman, US Patent 6,246,702. These rejections are respectfully traversed because the subject matter of claims 4-18 and 22 would not have been obvious to a person with ordinary skill in the art from Hopkins in view of Fellman.

Claims 4-18 and 22 are dependent on either one of claims 19, 20, 28, 29 and 30 and therefore recite the features thereof. Hopkins does not teach each and every feature of claims 19, 20, 28, 29 and 30. As explained in the Applicants' earlier submissions and acknowledged by the Examiner in the Office Action of 24 July 2008, Fellman does not disclose the features of claims 19, 20, 28, 29 and 30 which are also not disclosed in Hopkins. Accordingly, neither Hopkins, nor Fellman, neither alone nor in combination, discloses each and every feature of claims 4-18, 22 (nor of claims 19, 20, 28, 29 and 30).

In addition, there is no teaching, suggestion or motivation in Hopkins or Fellman that would have led one of ordinary skill in to combine the teachings of Hopkins or Fellman to arrive at the claimed invention or any other system, for that matter. The Office Action states that " it would have been obvious one of ordinary skill in the art at the time the invention was made to modify the teaching of Hopkins with the teaching of Fellman...for the purpose of eliminate collision fro [for] time-sensitive traffic and guarantee timely delivery (Abstract)". However, this motivation for the Hopkins-Fellman combination was extracted out of context from the Fellman abstract. The entire relevant portion of the Fellman abstract reads, "The device adapters limit admission rates and control the timing of all packets entering the network. By doing so, collisions are eliminated for time-sensitive traffic, thereby guaranteeing timely delivery". The Examiner has used this portion of the Fellman abstract to provide motivation for features which are substantially unrelated to the above cited property of the device adapters. Moreover, the Examiner has used the same motivation for the plurality of differing elements associated with the recitations of the rejected claims. The Applicants therefore submit that insufficient grounds obtain as to why a person with ordinary skill in the art would have been motivated to effect the Hopkins-Fellman combinations for the various rejected claims. Accordingly, the Applicants are unable to discern a proper motivation for the combination of Hopkins and Fellman. In any event, as discussed above, the combination of Hopkins or Fellman does not, and cannot, result in Applicant's claimed subject matter.

Based on the above remarks, the Applicants believe that the rejection of claims 4-18 and 22 under 35 U.S.C. 103 has been overcome. Accordingly, the Applicants respectfully request that this rejection be reconsidered and withdrawn, and that claims 4-18 and 22 be allowed.

The Applicants view this reply as being fully responsive to all issues in this case and to place this application into a position of allowance. Favorable review and passage to issuance is therefore requested.

Respectfully submitted,



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